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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,053	12/21/2001	Ernst Schneider	2345/164	4676

26646 7590 09/29/2004

KENYON & KENYON
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER

TAYLOR, BARRY W

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 09/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/937,053

Applicant(s)

SCHNEIDER ET AL.

Examiner

Barry W Taylor

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. The Examiner's previous Office Action made final on (3/16/2004) is vacated.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 18-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chin et al (5,729,588 hereinafter Chin) in view of Newman et al (5,987,633 hereinafter Newman).

Regarding claim 18. Chin teaches a system for validating connection-related communications data collected by a digital switching exchange (see Title, abstract), comprising:

at least one test unit (see figure 1 wherein test unit 50), which can be linked to the digital switch (see 30 figure 1), having a first memory unit for storing dedicated communications elements (col. 2 lines 25-52, col. 3 line 8 – col. 4 line 28, col. 6 line 5 – col. 7 line 62), a device for initiating the establishment of at least one dedicated test-communications connection (see figure 1 wherein test unit 50 has a device 20 that produces a test signal), a device for producing a connection-related reference data record from the corresponding communications elements, from the starting and ending instants of the test communications connection (see figures 2a-2b and figures 3a-3b regarding automated message accounting features data, abstract, col. 1 lines 25-52, col. 4 lines 29-34), a device for transmitting the connection-related communications elements to the digital switching exchange (col. 4 lines 29-34);

the digital switching exchange (see 30 figure 1), which functions in response to the received, connection-related communications elements to establish the relevant test communications connection (see figure 1 wherein a device 40 responds to test signal);

a system evaluator (see 60 figure 1) assigned to the test unit (see test unit 50 figure 1) and to the digital switching exchange, including a device for comparing the contents of the connection-related reference data record to the contents of each connection-related communications data record belonging thereto (col. 2 lines 44-46, col. 3 lines 25-28, col. 4 lines 2-8 and lines 40-56, col. 6 line 5 – col. 9 line 46),

wherein the digital switch exchange has a device for generating a plurality of communications data records for respective test communications connection and the system evaluator has a device for recognizing communications data records which are assigned to any test communications connection, and a comparator compares each of the communications data records that correspond to the respective reference data record. Chin further shows (see figure 1 wherein controller 70 used for converting into predefined format and col. 2 lines 44-46, col. 3 lines 1-67, col. 4 line 2 – col. 9 line 46) for converting the format of the reference data record into a predefined format and a second device (see figure 1 wherein the digital switch 30 responds to test call by converting into predefined format via 40 and col. 2 lines 44-46, col. 3 lines 1-67, col. 4 line 2 – col. 9 line 46) for converting the format of each communication data record into the predefined format enabling for faulty data to be indicated (col. 7 lines 50-57, col. 8 lines 16-57).

According to Applicant's (see paper number 6, Amendment "A", dated 12/22/2003 page 8 lines 15-16, see also Applicant's newly amended specification page 1 lines 24-28, see paper dated 6/21/2004 page 9 lines 24-28), Chin only checks for correctness of message accounting data (AMA data) generated by a device verses Applicant's newly amended claim language wherein **any communications connection** are recognized and compared to respective reference data (see Applicant's newly recited independent claim language appearing in paper number 6, page 3, Amendment "A", dated 12/22/2003 and supplemental listing in paper dated 6/21/2004, page 3).

Newman teaches test system to verify billing records within the telecommunications network wherein logic captures timepoints associated with critical events in a phone call from a test application (particularly the events important to correct billing) and compares the timepoints with actual results from the network tested (abstract, col. 4 lines 48-53). Newman discloses automatically comparing actual results with anticipated results stored as part of a test case (col. 11 lines 14-16). Newman invention may be best seen in figure 2 wherein test unit 280 linked to network under test 200. Newman uses a specialized hardware interface between network entities (see 230 figure 2), allows communicating the critical event data (e.g. billing information) to the Network Information Concentrator (see 220 figure 2), which in turns facilitates entry of the event data into a centralized database (col. 15 line 9 – col. 17 line 3). Newman discloses using time information to correlate associated records and logs events in the central database (240 figure 2). Newman captures timepoints associated with critical events in a phone call from a test application perspective and compares those timepoints with actual results from the test network (col. 17 line 16 – col. 18 line 62). Newman not only uses time information but also uses “test case number” which has a call start time, call end time, and a set of appropriate time points (col. 19 line 7-62) so that responses received from network under test (200 figure 2) may be properly aligned for comparison. Newman further discloses that switches involved in the call also store CDRs into the centralized database (col. 21 lines 61-63, col. 23 lines 64-65). Newman also uses registry information (col. 24 line 24 – col. 33 line 19) to determine originating and terminating switch and to determine if records for particular time and device have

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been loaded into central database (col. 33 lines 33-35). Newman discloses using a time server for storing timepoints for various devices, clients and servers (col. 34 lines 65-67) as well as providing time differentials between devices (columns 35-36). Newman teaches gathering information on variables and counters to be returned to test unit (col. 37 lines 6-7).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the recording verification system as taught by Chin to use a Network Information Concentrator as taught by Newman for the benefit of capturing time stamped events (i.e. actual results) of all devices involved in telephone call so that billing records may be accurately verified by comparing the actual results with anticipated results.

Regarding claims 19-23, 25-28 and 31-32. Chin teaches wherein the system evaluator (see 60 figure 1), in addition, includes the following features:

A first device (see figure 1 wherein controller 70 used for converting into predefined format and col. 2 lines 44-46, col. 3 lines 1-67, col. 4 line 2 – col. 9 line 46) for converting the format of the reference data record into a predefined format and a second device (see figure 1 wherein the digital switch 30 responds to test call by converting into predefined format via 40 and col. 2 lines 44-46, col. 3 lines 1-67, col. 4 line 2 – col. 9 line 46) for converting the format of each communication data record into the predefined format.

Newman also teaches a first device used for converting a format of reference data record into a predefined data record format and a second device used for converting a format of each communications data record into the predefined record format (see figure 2 wherein test unit 280 linked to network under test 200. Newman uses a specialized hardware interface between network entities (see 230 figure 2), allows communicating the critical event data (e.g. billing information) to the Network Information Concentrator (see 220 figure 2), which in turns facilitates entry of the event data into a centralized database (col. 15 line 9 – col. 17 line 3). Newman discloses using time information to correlate associated records and logs events in the central database (240 figure 2). Newman captures timepoints associated with critical events in a phone call from a test application perspective and compares those timepoints with actual results from the test network (col. 17 line 16 – col. 18 line 62). Newman not only uses time information but also uses “test case number” which has a call start time, call end time, and a set of appropriate time points (col. 19 line 7-62) so that responses received from network under test (200 figure 2) may be properly aligned for comparison. Newman further discloses that switches involved in the call also store CDRs into the centralized database (col. 21 lines 61-63, col. 23 lines 64-65). Newman also uses registry information (col. 24 line 24 – col. 33 line 19) to determine originating and terminating switch and to determine if records for particular time and device have been loaded into central database (col. 33 lines 33-35). Newman discloses using a time server for storing timepoints for various devices, clients and servers (col. 34 lines 65-67) as well as providing time differentials between devices (columns 35-36). Newman

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teaches gathering information on variables and counters to be returned to test unit (col. 37 lines 6-7).

Regarding claim 24. Chin teaches a system for validating connection-related communications data collected by a digital switching exchange (see Title, abstract), comprising:

a system evaluator (see 60 figure 1) assigned to the test unit (see test unit 50 figure 1) and to the digital switching exchange, including a device for comparing the contents of the connection-related reference data record to the contents of each connection-related communications data record belonging thereto (col. 2 lines 44-46, col. 3 lines 25-28, col. 4 lines 2-8 and lines 40-56, col. 6 line 5 – col. 9 line 46),

wherein the digital switch exchange has a device for generating a plurality of communications data records for respective test communications connection and the system evaluator has a device for recognizing communications data records which are assigned to any test communications connection, and a comparator compares each of the communications data records that correspond to the respective reference data record. Chin further shows (see figure 1 wherein controller 70 used for converting into predefined format and col. 2 lines 44-46, col. 3 lines 1-67, col. 4 line 2 – col. 9 line 46) for converting the format of the reference data record into a predefined format and a second device (see figure 1 wherein the digital switch 30 responds to test call by converting into predefined format via 40 and col. 2 lines 44-46, col. 3 lines 1-67, col. 4 line 2 – col. 9 line 46) for converting the format of each communication data record into

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the predefined format enabling for faulty data to be indicated (col. 7 lines 50-57, col. 8 lines 16-57).

According to Applicant's (see paper number 6, Amendment "A", dated 12/22/2003 page 8 lines 15-16, see also Applicant's newly amended specification page 1 lines 24-28, see paper dated 6/21/2004 page 9 lines 24-28), Chin only checks for correctness of message accounting data (AMA data).

Newman teaches test system to verify billing records within the telecommunications network wherein logic captures timepoints associated with critical events in a phone call from a test application (particularly the events important to correct billing) and compares the timepoints with actual results from the network tested (abstract, col. 4 lines 48-53). Newman discloses automatically comparing actual results with anticipated results stored as part of a test case (col. 11 lines 14-16). Newman invention may be best seen in figure 2 wherein test unit 280 linked to network under test 200. Newman uses a specialized hardware interface between network entities (see 230 figure 2), allows communicating the critical event data (e.g. billing information) to the Network Information Concentrator (see 220 figure 2), which in turns facilitates entry of the event data into a centralized database (col. 15 line 9 – col. 17 line 3). Newman discloses using time information to correlate associated records and logs events in the central database (240 figure 2). Newman captures timepoints associated with critical events in a phone call from a test application perspective and compares those timepoints with actual results from the test network (col. 17 line 16 – col. 18 line 62).

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Newman not only uses time information but also uses "test case number" which has a call start time, call end time, and a set of appropriate time points (col. 19 line 7-62) so that responses received from network under test (200 figure 2) may be properly aligned for comparison. Newman further discloses that switches involved in the call also store CDRs into the centralized database (col. 21 lines 61-63, col. 23 lines 64-65). Newman also uses registry information (col. 24 line 24 – col. 33 line 19) to determine originating and terminating switch and to determine if records for particular time and device have been loaded into central database (col. 33 lines 33-35). Newman discloses using a time server for storing timepoints for various devices, clients and servers (col. 34 lines 65-67) as well as providing time differentials between devices (columns 35-36). Newman teaches gathering information on variables and counters to be returned to test unit (col. 37 lines 6-7).

It would have been obvious for any one of ordinary skill in the art at the time of invention to modify the recording verification system as taught by Chin to use a Network Information Concentrator as taught by Newman for the benefit of capturing time stamped events (i.e. actual results) of all devices involved in telephone call so that billing records may be accurately verified by comparing the actual results with anticipated results.

Method claim 29 is rejected for the same reasons as system claims 18 and 24 since the recited elements would perform the claimed method steps.

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Regarding claim 30. Chin teaches using uniform format (see AMA format used col. 3 line 59 – col. 4 line 67, col. 6 lines 13-51, col. 8 lines 1-57, col. 9 lines 17-46).

Response to Arguments

3. Applicant's arguments with respect to claims 18-32 have been considered but are moot in view of the new ground(s) of rejection.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barry W. Taylor whose telephone number is (703) 305-4811. The examiner can normally be reached on Monday-Friday from 6:30am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on (703) 305-4708. The fax phone number for this Group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Technology Center 2600 customer service Office whose telephone number is (703) 306-0377.


CURTIS KUNTZ

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600